When a seam or some other equivalent thicker part travels through the nip N in the size press shown in Fig. 1, the soft roll coating 13 is deformed and it functions as a spring, with the result that the apparatus, in particular the roll 1 pivotally mounted on the frame 14, begins to vibrate. Vibration deforms the soft roll coating 13 further, whereupon the vibration is intensified and the roll 1 is brought to a resonating state. In conventional arrangements, this has led to the fact that it has been necessary to change the running speed because it has not been possible to dampen the vibration otherwise. In the invention, however, the damping of vibration has been taken care of such that a dynamic damper that is automatically tuned in accordance with the invention is mounted on the bearing housing 2 of the vibrating roll 1, which damper is illustrated in more detail in Fig. 2 of the drawing.